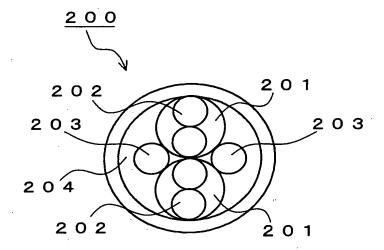
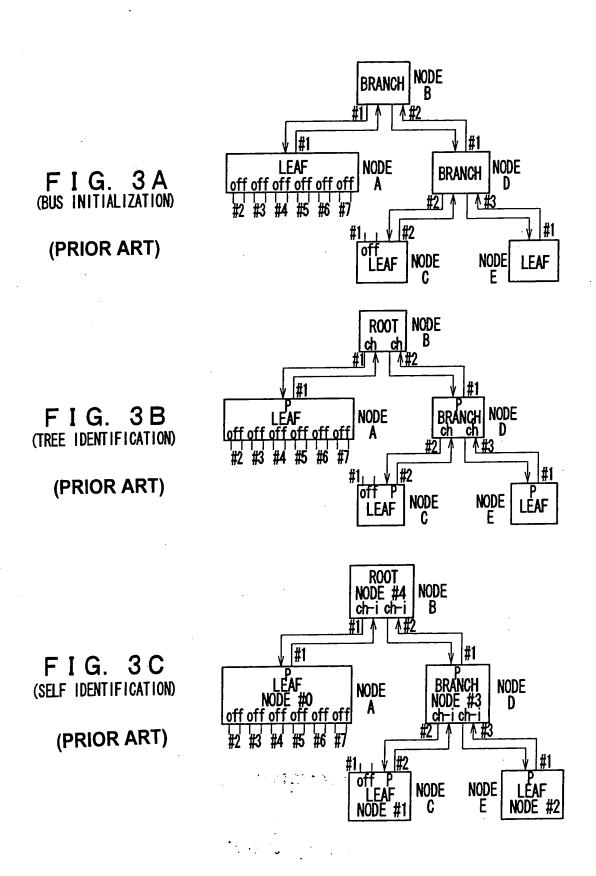


11



# F I G. 2







#### F I G. 4

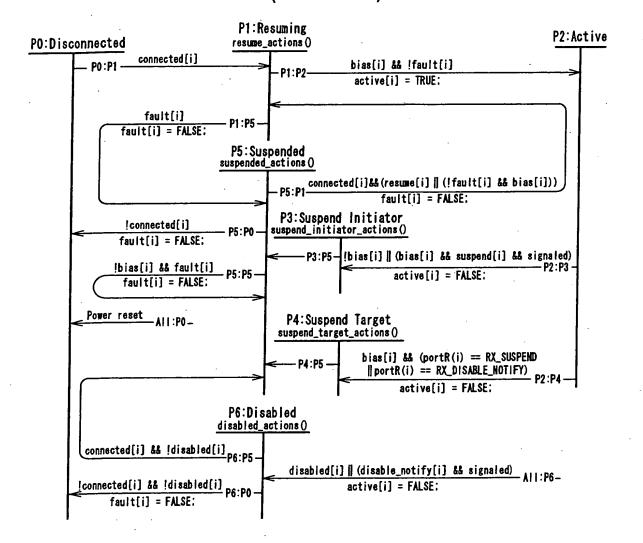
(PRIOR ART) A2:Grant AO:Idle grant\_actions() idle\_actions() root && child\_request() && !arb\_OK() A0:A2  $portR(requesting\_child) = RX\_REQUEST\_CANCEL$ A2:A0 arb\_timer = 0 arb\_timer = subaction\_gap || arb timer == arb\_reset\_gap A1:Request -AO: AO: request\_actions() gap\_detect\_actions() portR(parent\_Port) == RX\_GRANT A1:A2 & child\_request() & lown\_request !root && (child\_request() [] arb\_OK()) portR(parent\_port) = RX\_GRANT &&!(child\_request() || own\_request) portR(requesting\_child) = RX\_DATA\_PREFIX receive\_port = requesting\_child A2:RX-A1:A0arb\_timer = 0: RX:Receive portR(parent\_port) = RX\_GRANT && own\_request A1:TX receive\_actions() //Arbitration WON -A1:RX\_portR(parent\_port) = RX\_DATA\_PREFIX receive\_port = parent\_port
//Arbitration\_LOST or\_deferred TX:Transmit transmit\_actions() !concatenated\_packet && fly\_by\_OK() // Arbitration WON breq = IMED\_REQ || (root && arb\_QK()) -TX:TX end\_of\_packet && link\_concatenation //Arbitration WON // Reinvokes transmit\_actions () end\_of\_packet && !link\_concatenation arb\_timer = 0 ping\_response <u>isbr</u> to RO:Reset start to S4:Self-ID TX initiated\_reset = TRUE arb\_timer = 0: S4:A0a-from S4:Self-ID TX reset\_time = SHORT\_RESET\_TIME - S4: A0b\_ PH: PHY Response arb\_timer = 0; phy\_response\_actions() accelerating = TRUE: phy\_response AO:PH // Transmit a PHY packet PH: AO arb\_timer = 0; data\_coming() -AO:RX -**MArbitration LOST or deferred** portR(receive\_port) == IDLE || (!concatenated\_packet && !fly\_by\_OK()) arb\_timer = 0 cancatenated\_packet RX:RX // Reinvokes receive\_actions()

A STATE OF THE STA



## F I G. 5

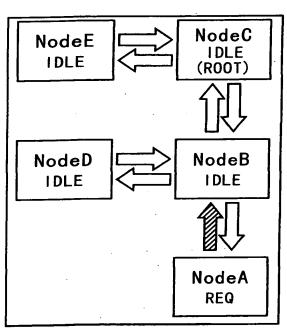
#### (PRIOR ART)





F I G. 6 A

F I G. 6 B



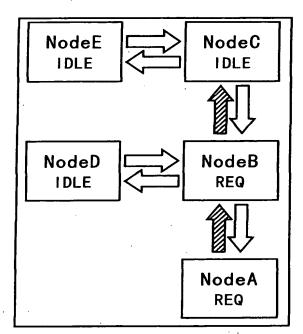
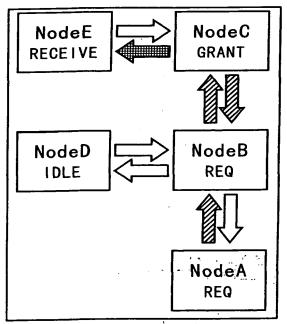
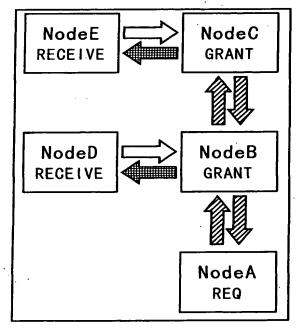


FIG.6C

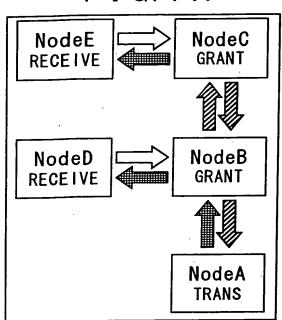
F I G. 6 D



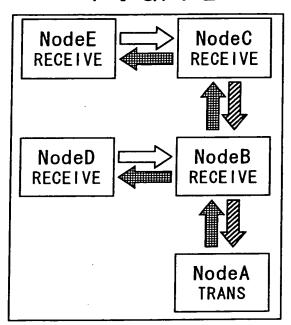




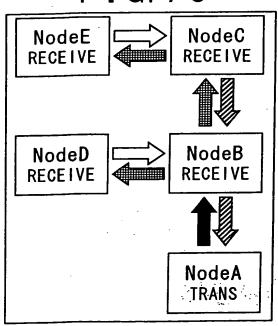
F I G. 7 A



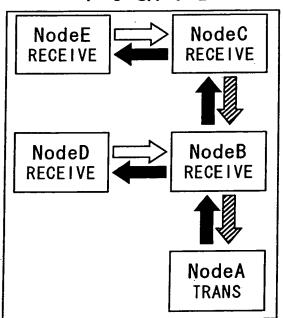
F I G. 7 B



F I G. 7 C

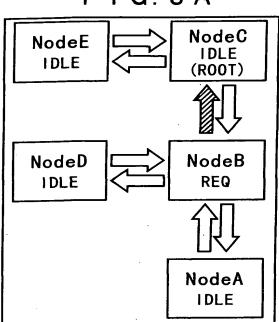


F I G. 7 D

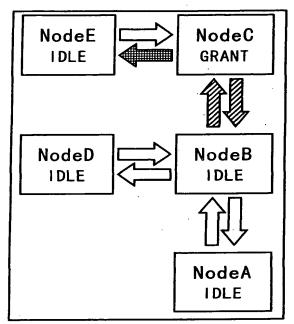




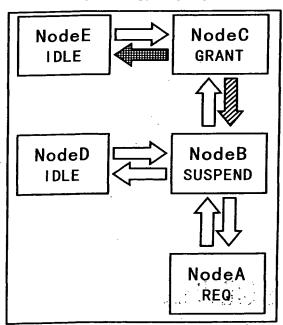
F I G. 8 A



F I G. 8 B

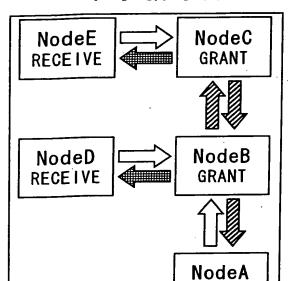


F 1 G. 8 C

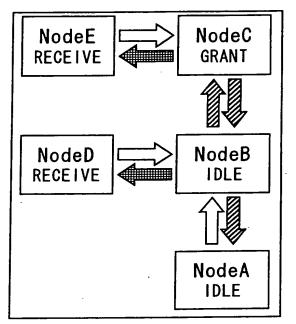




F I G. 9 A



F I G. 9 B



F I G. 9 C

IDLE

